FIGURES

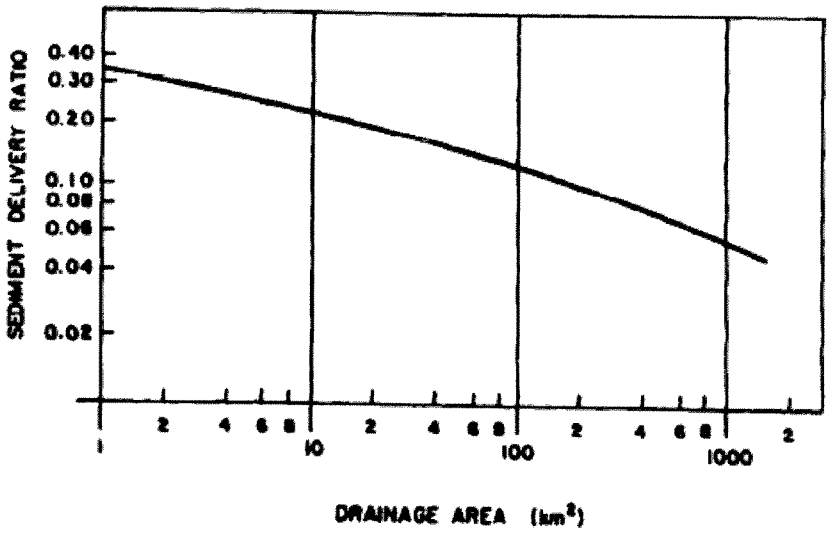

FIGURE III-13 SEDIMENT DELIVERY RATIO AS A FUNCTION OF WATERSHED DRAINAGE AREA (VANONI, 1975)

Figure 1. **Sediment Delivery Ratio as a Function of Watershed Drainage Area (from Mills et al. 1985)**

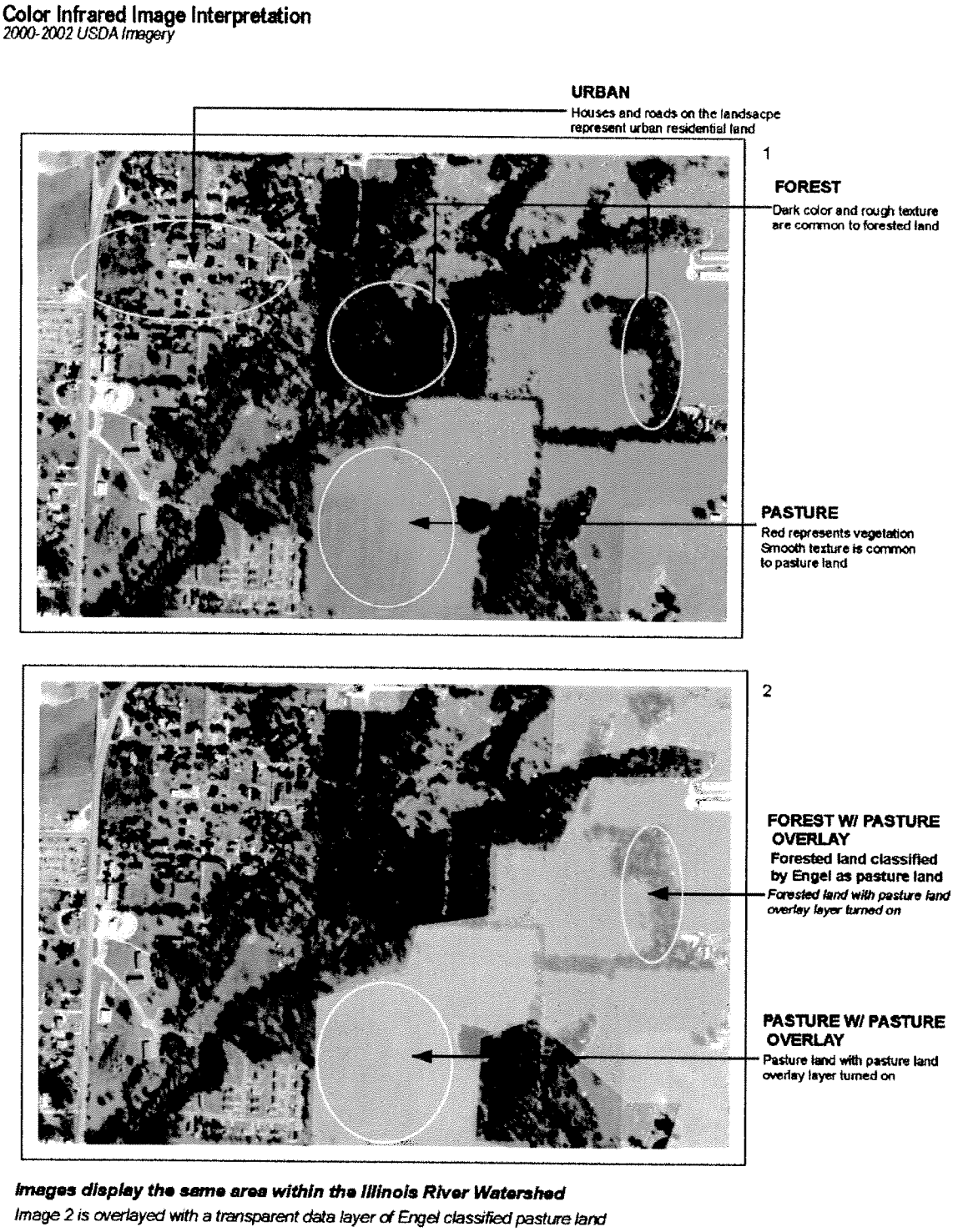

Figure 2. **Key to Interpretation of Color Infrared Imagery for the Illinois River Watershed**

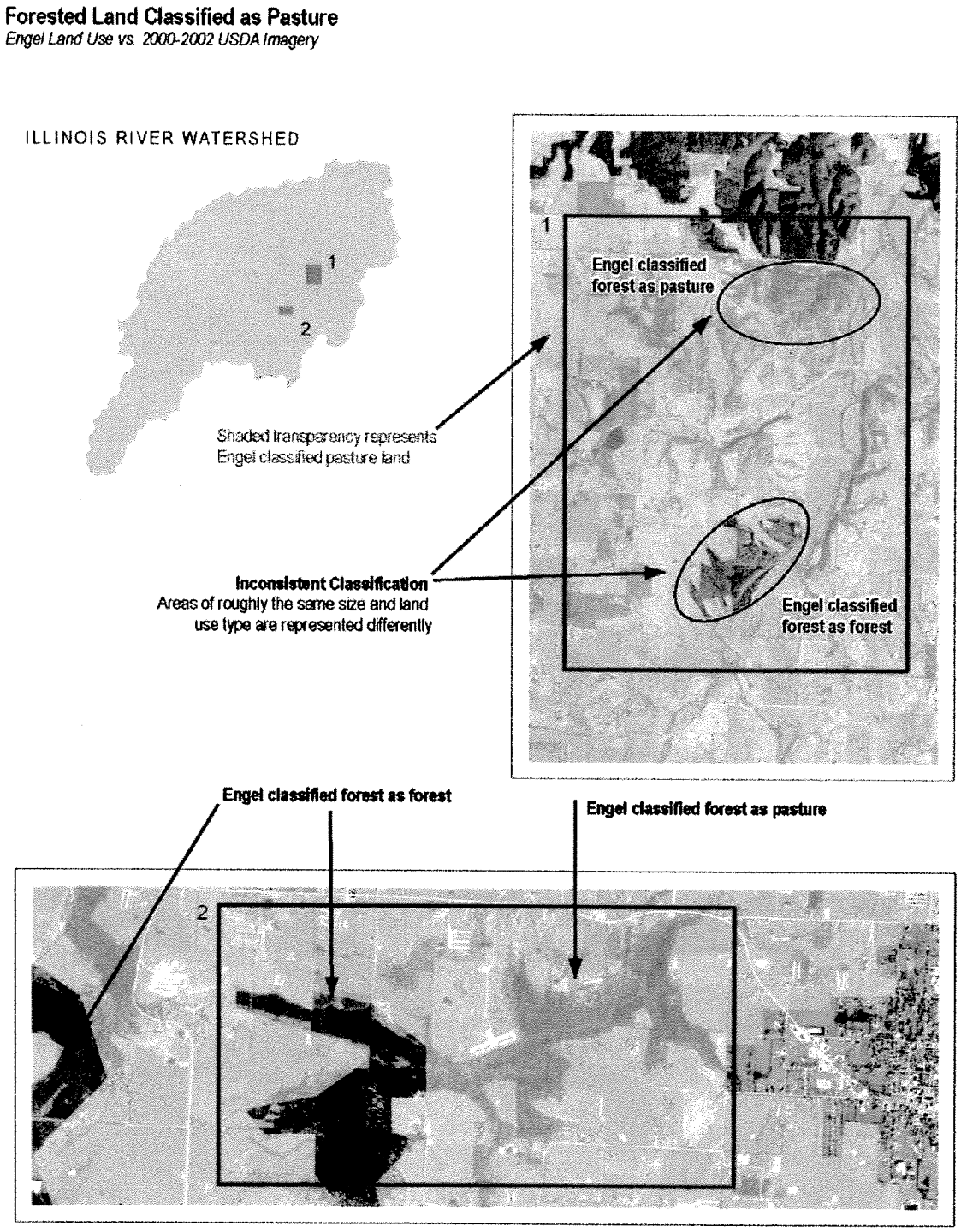

Figure 3. **Examples of Forested Land Classified as Pasture by Dr. Engel in his GLEAMS Model**

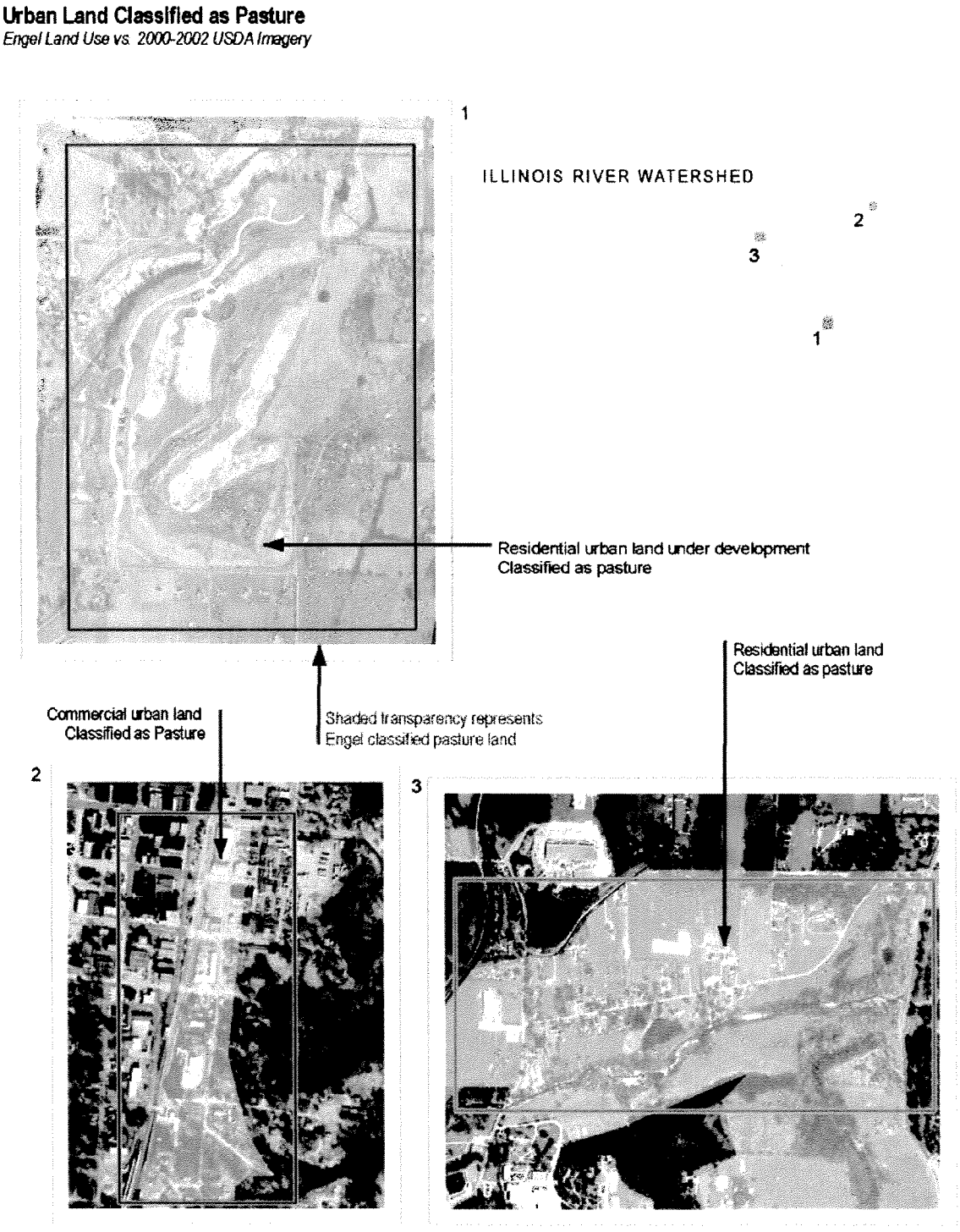

Figure 4. Examples of Urban Land Classified as Pasture by Dr. Engel in his GLEAMS Model

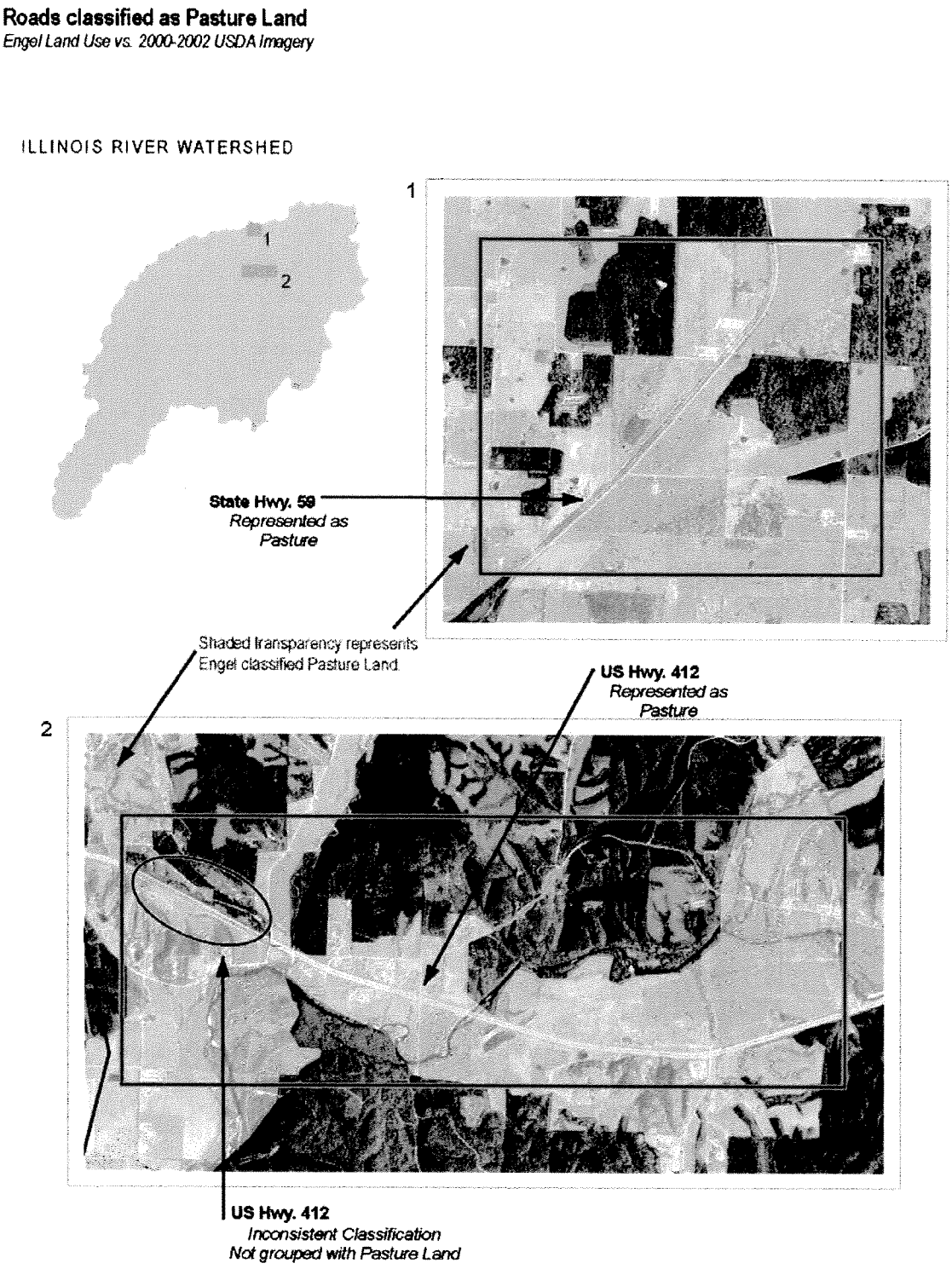

Figure 5. Examples of Roads Classified as Pasture by Dr. Engel in his GLEAMS Model

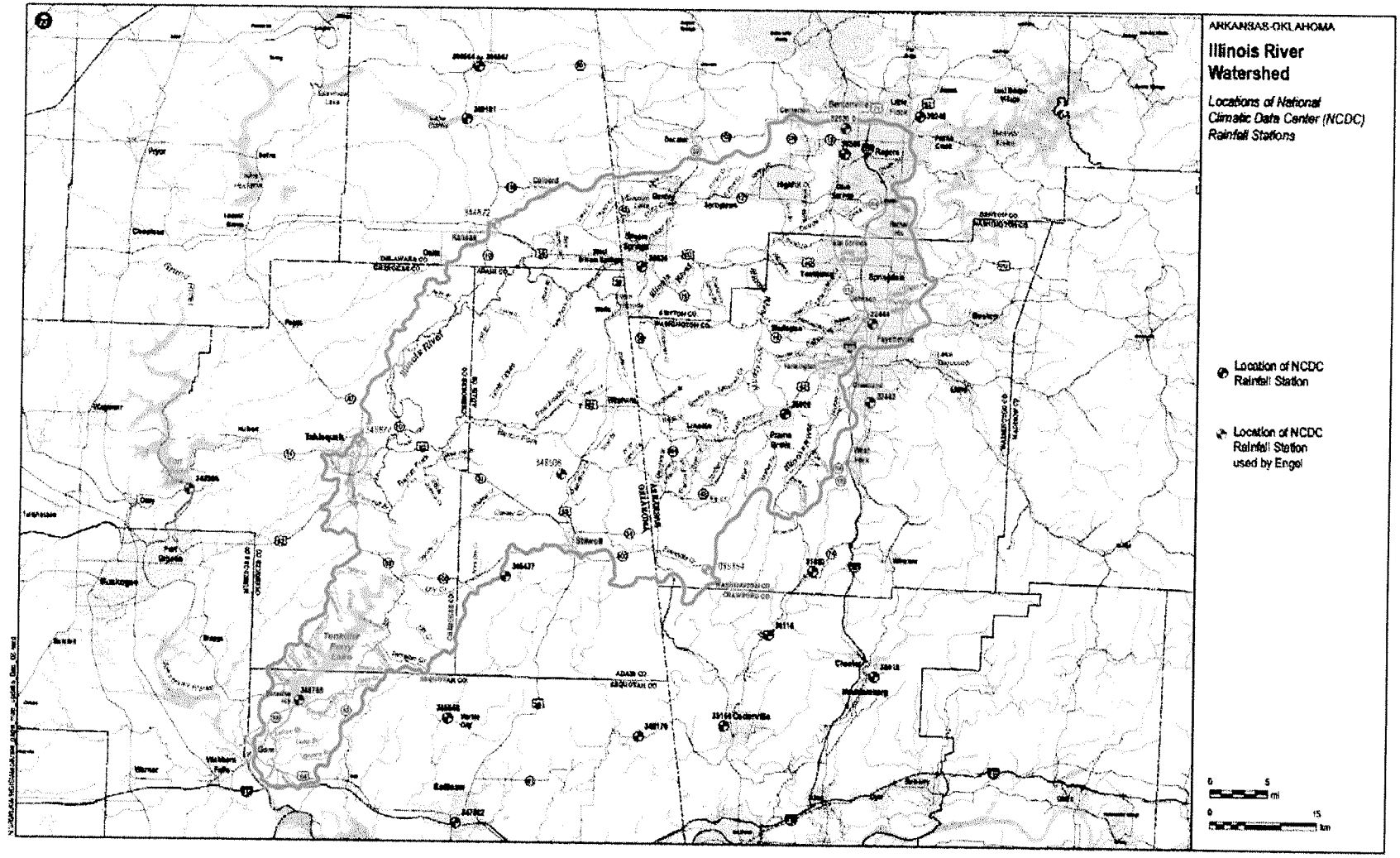

Figure 6. Map of Rain Gage Locations

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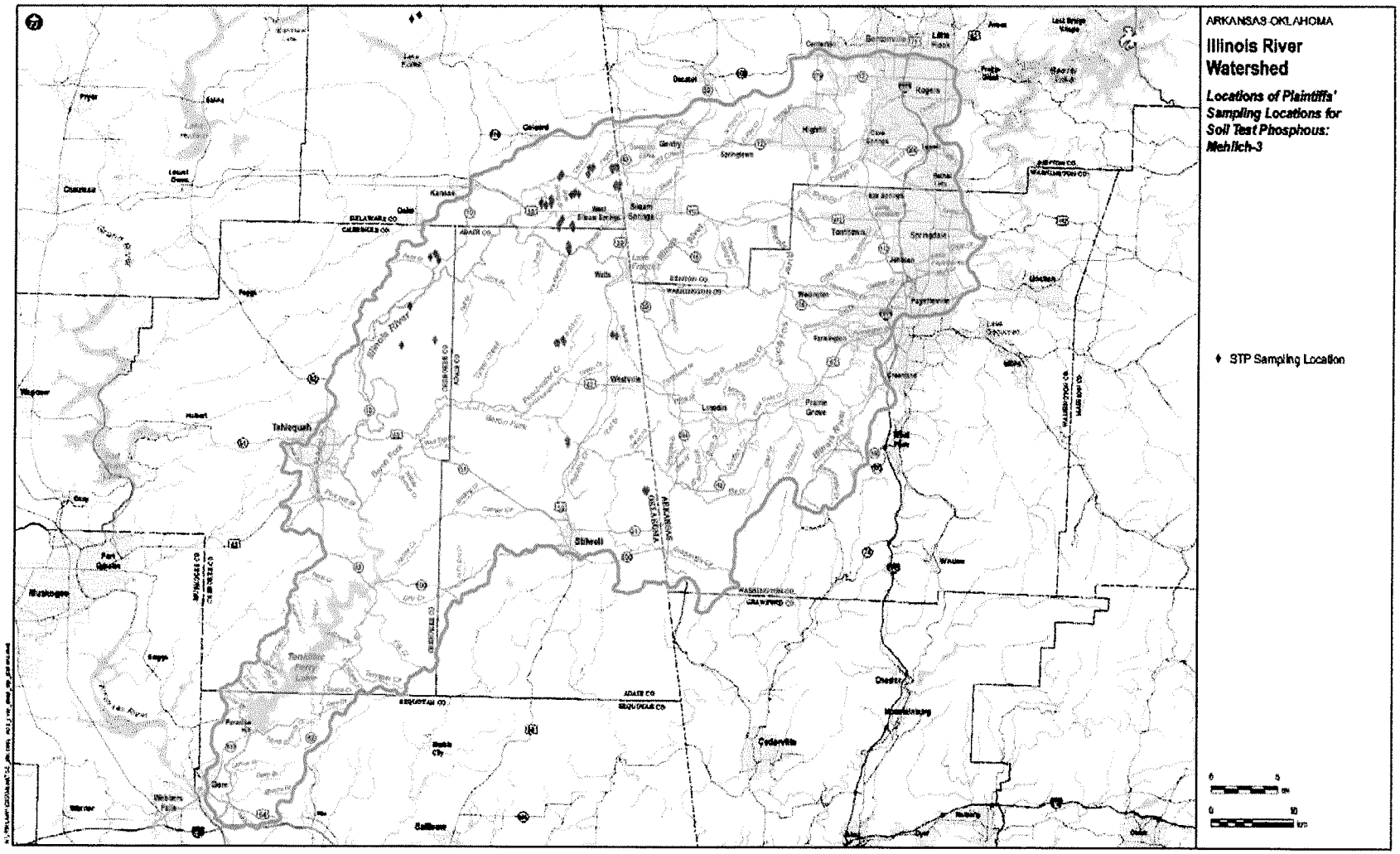

Figure 7. Map of Locations for Plaintiffs' Soil Test Phosphorus Measurements

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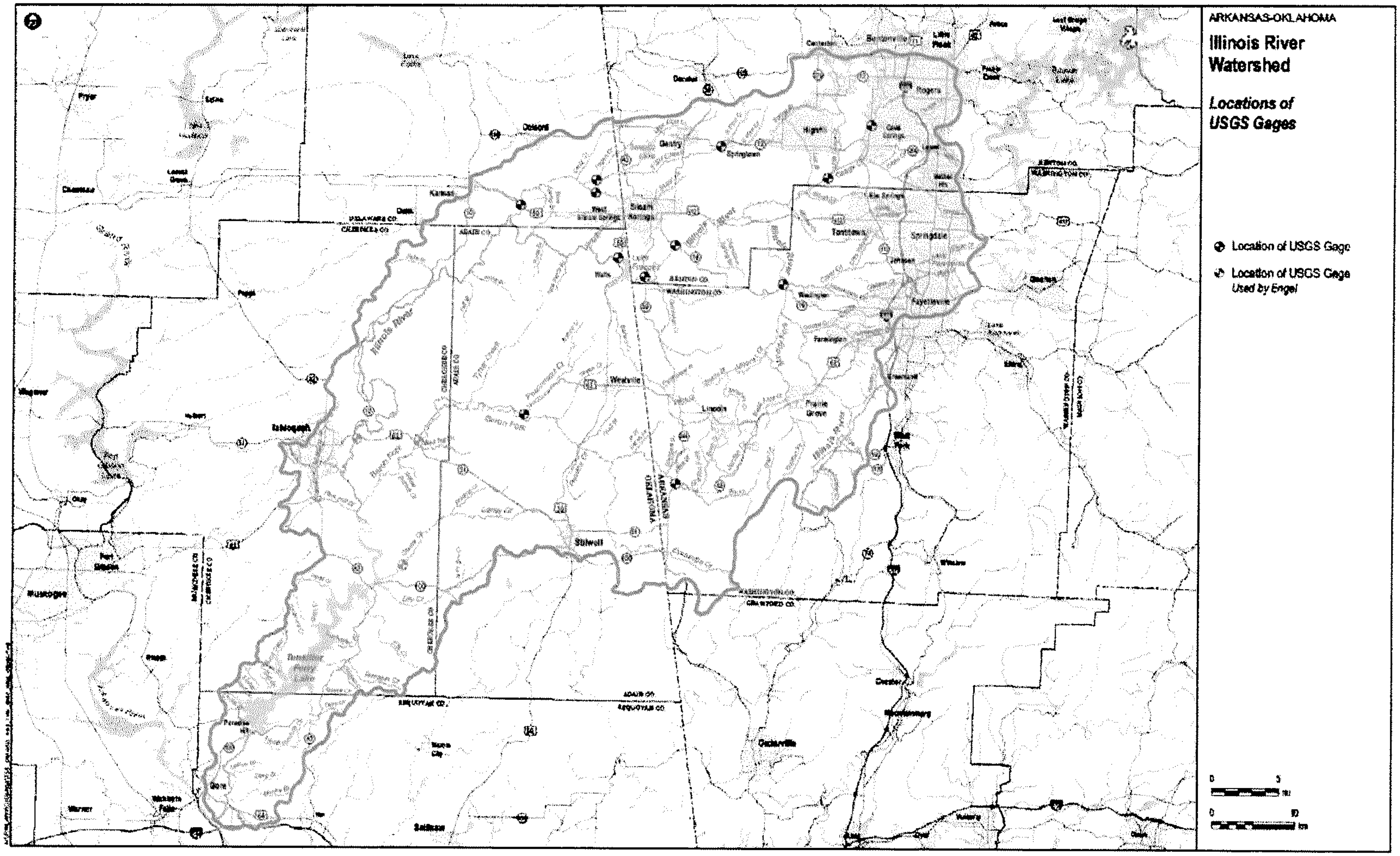

Figure 8. **Map of Locations of USGS Sampling Stations with Measurements for Daily Average Flow**

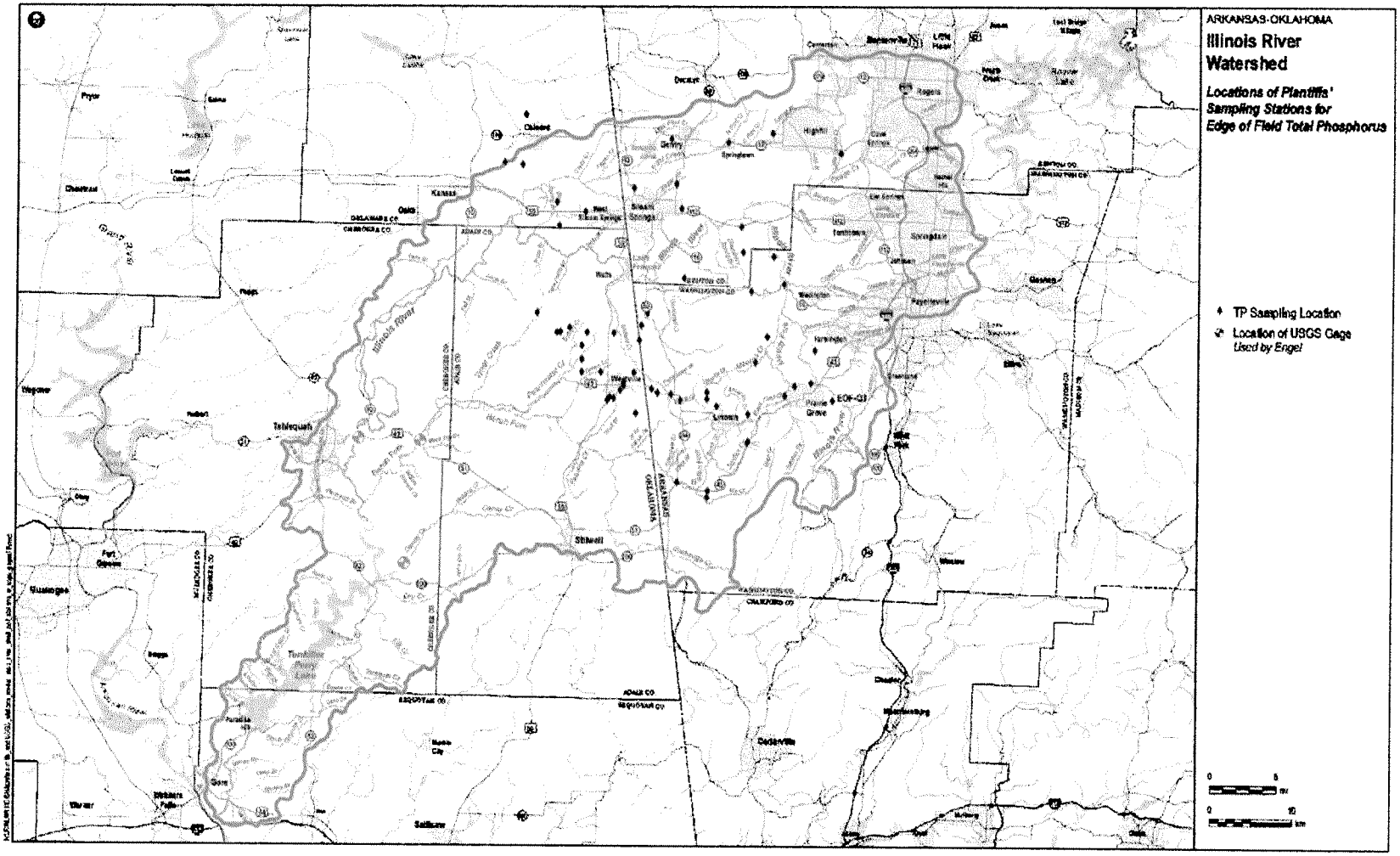

Figure 9. Map of Locations of Sampling Stations for Plaintiffs' Measurements of Total Phosphorus at Edge-of-Field

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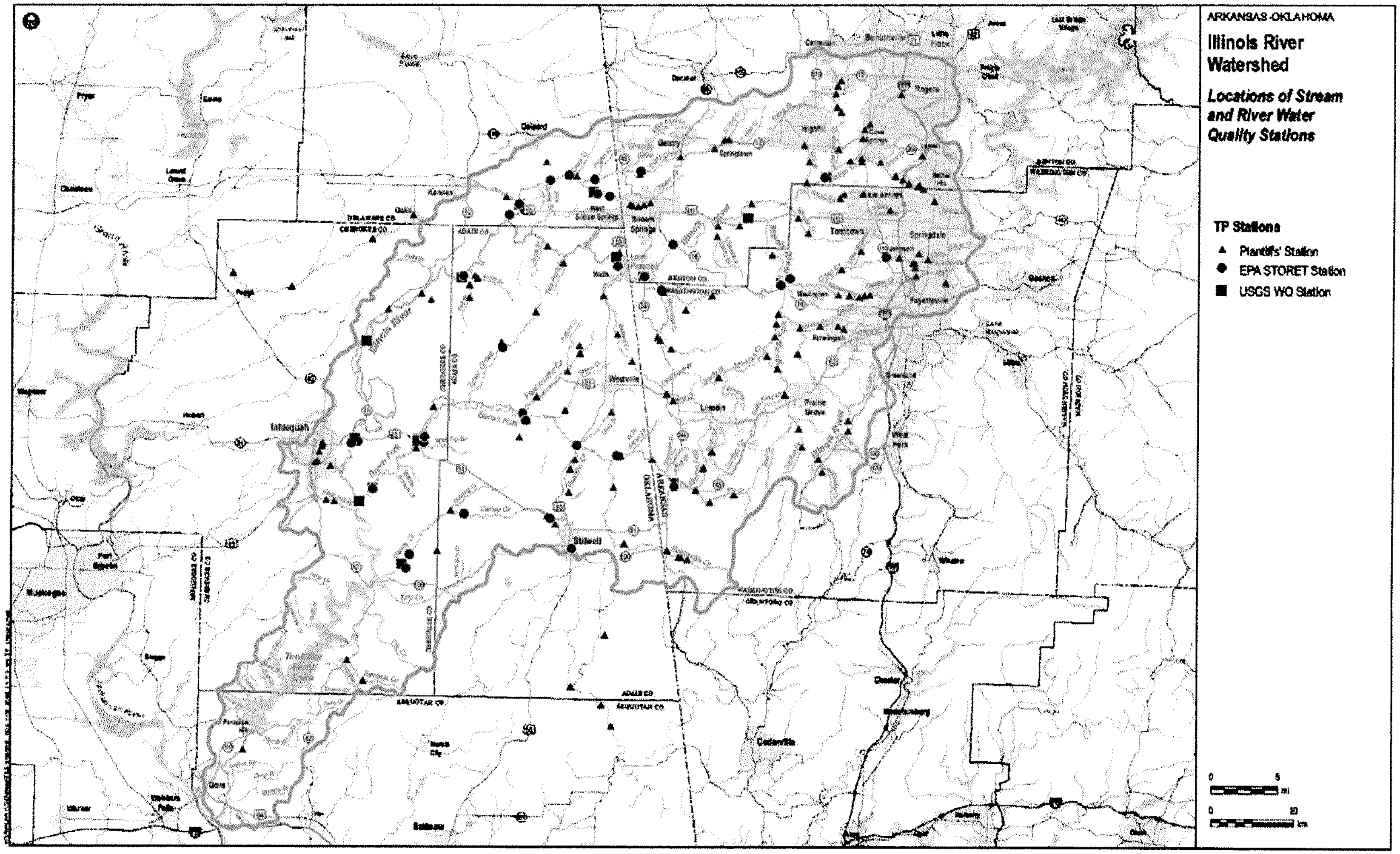

Figure 10. **Map of Locations of Sampling Stations for Measurements of Total Phosphorus Concentrations in Streams and Rivers in the IRW**

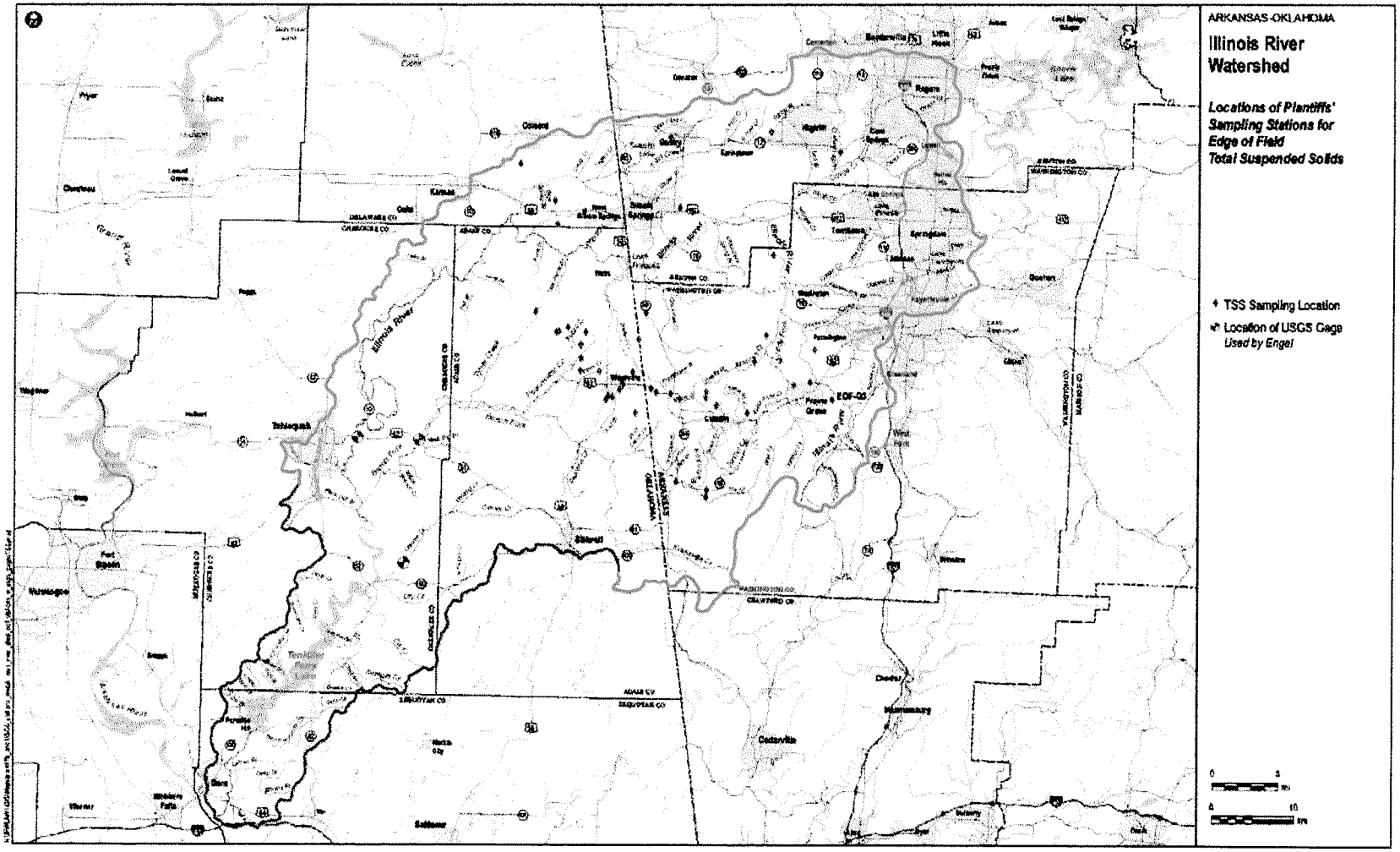

Figure 11. Map of Sampling Locations for Plaintiffs' Measurements of Total Solids at Edge-of-Field

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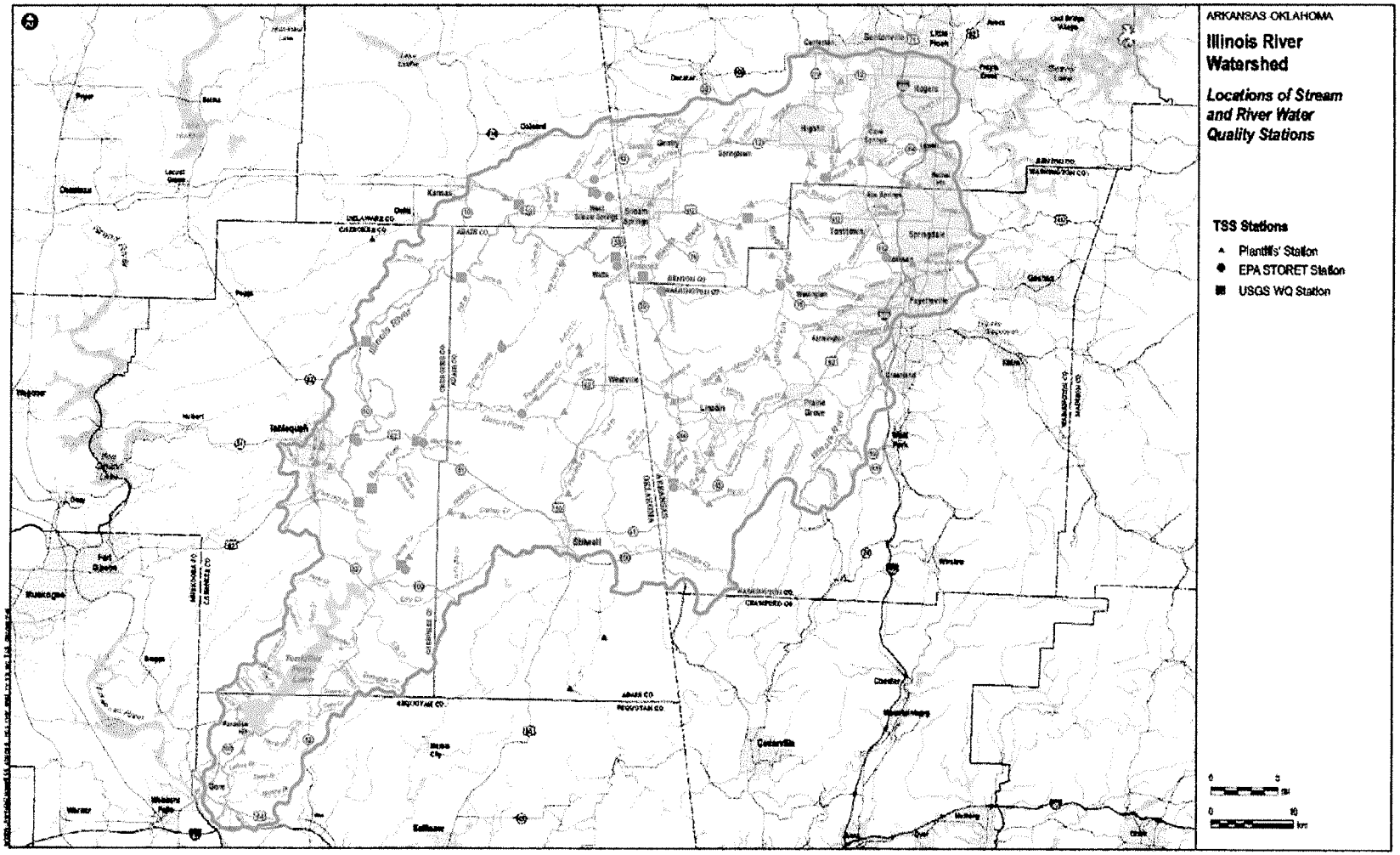

Figure 12. Map of Locations of Sampling Stations for Measurements of Total Solids in Streams and Rivers in the IRW

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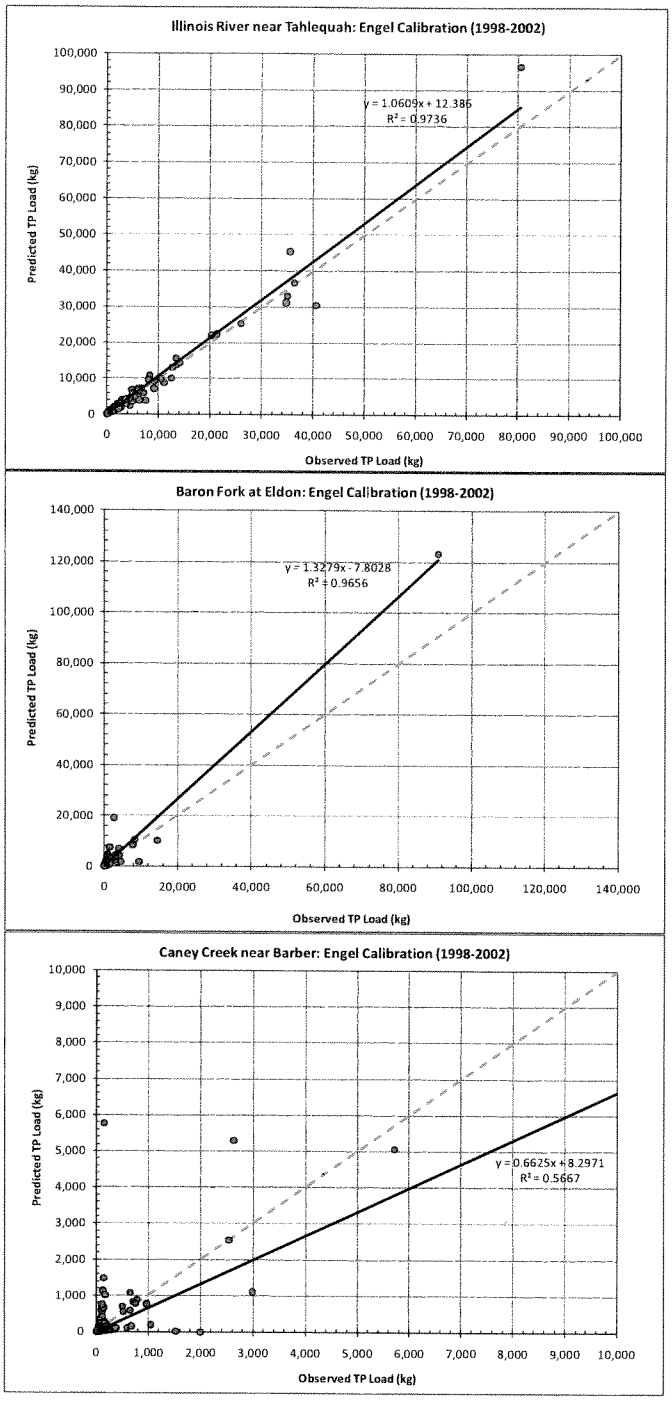


Figure 13. **Dr. Engel's Calibration Results for Daily P Load near Tahlequah (top panel), Baron Fork at Eldon (middle panel) and Caney Creek near Barber (bottom panel) with Lines of 1:1 Correspondence between Predicted and Observed Loads**

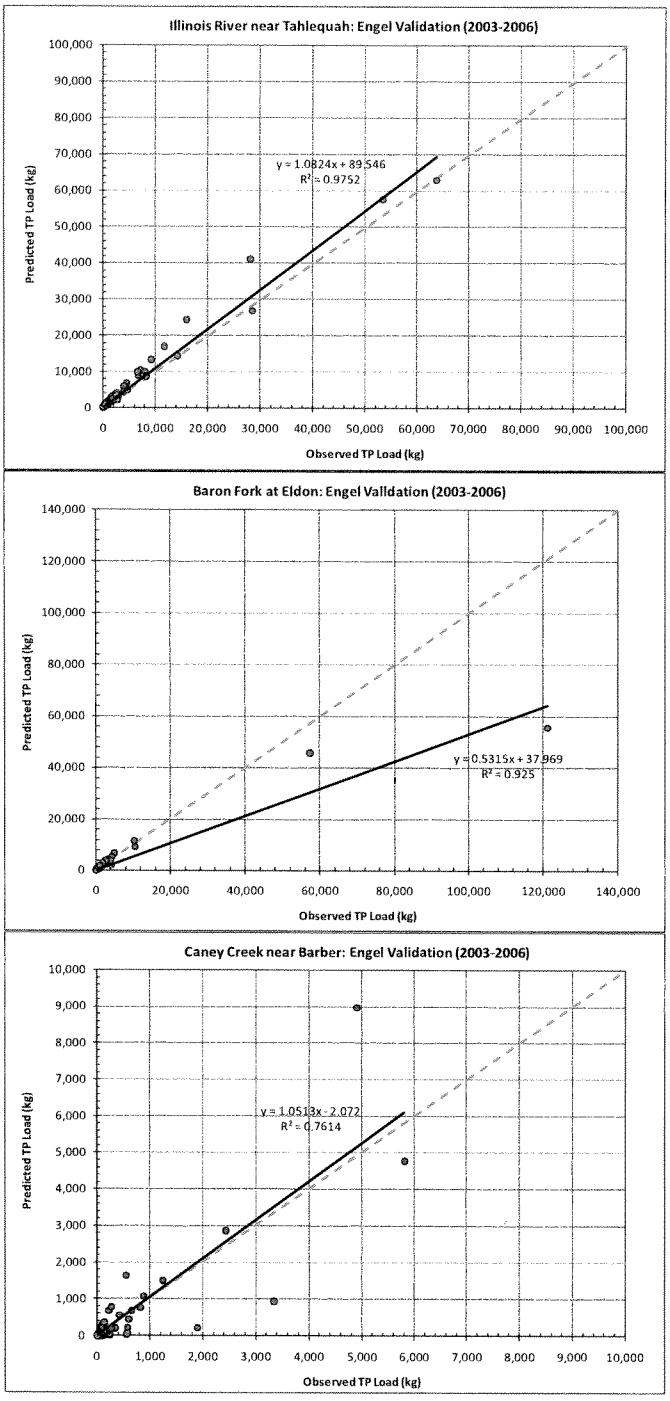
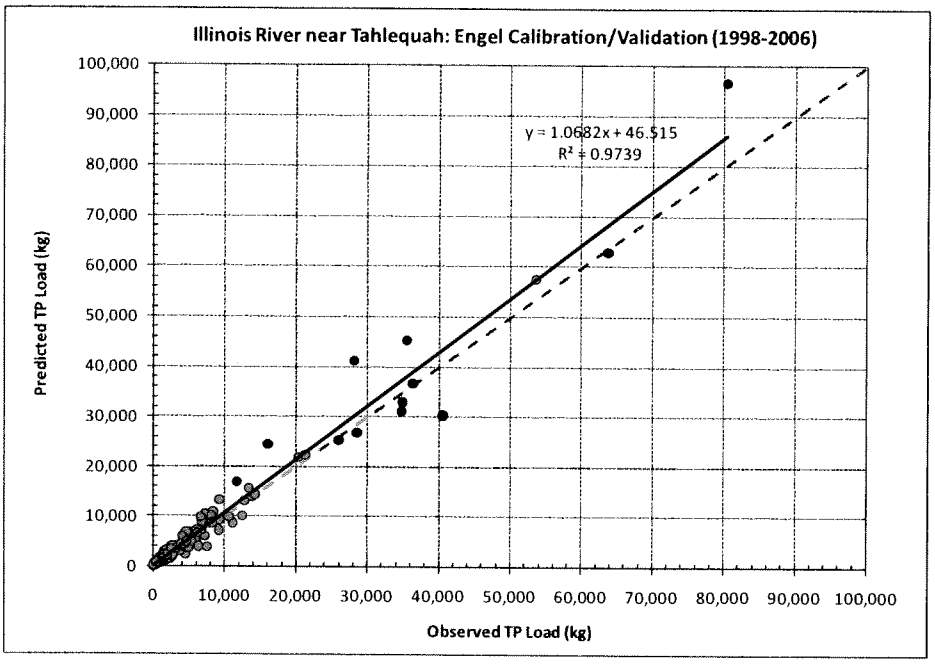


Figure 14. **Dr. Engel's Purported Validation Results for Daily P Load near Tahlequah (top panel), Baron Fork at Eldon (middle panel) and Caney Creek near Barber with Lines of 1:1 Correspondence between Predicted and Observed Loads**



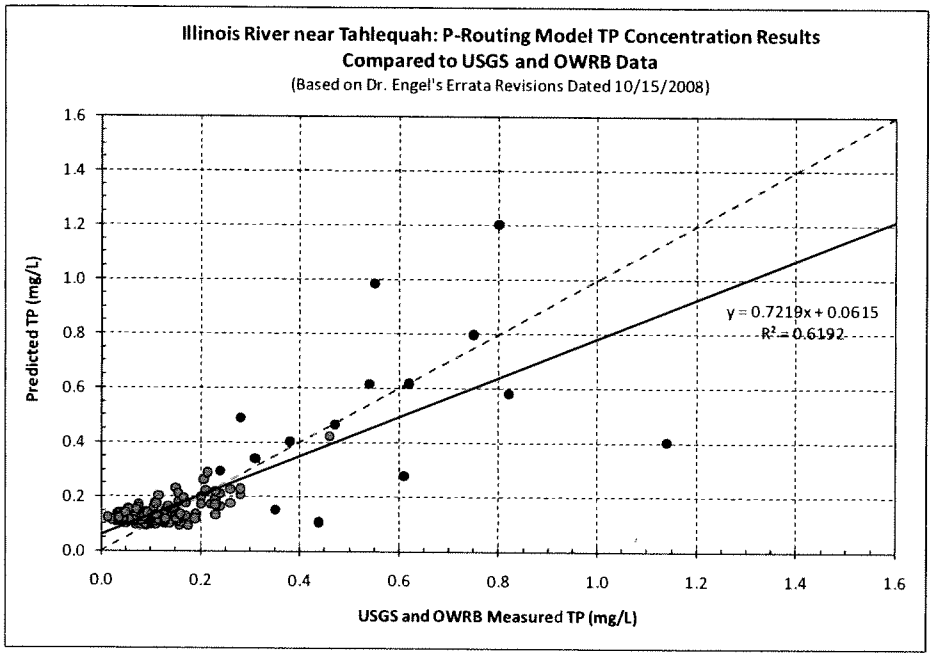


Figure 15. **Dr. Engel's Combined Calibration/Purported Validation Results near Tahlequah for his Predicted Daily P Loads (top panel) and Daily P Concentrations that Correspond to these Predicted P Loads (bottom panel)**

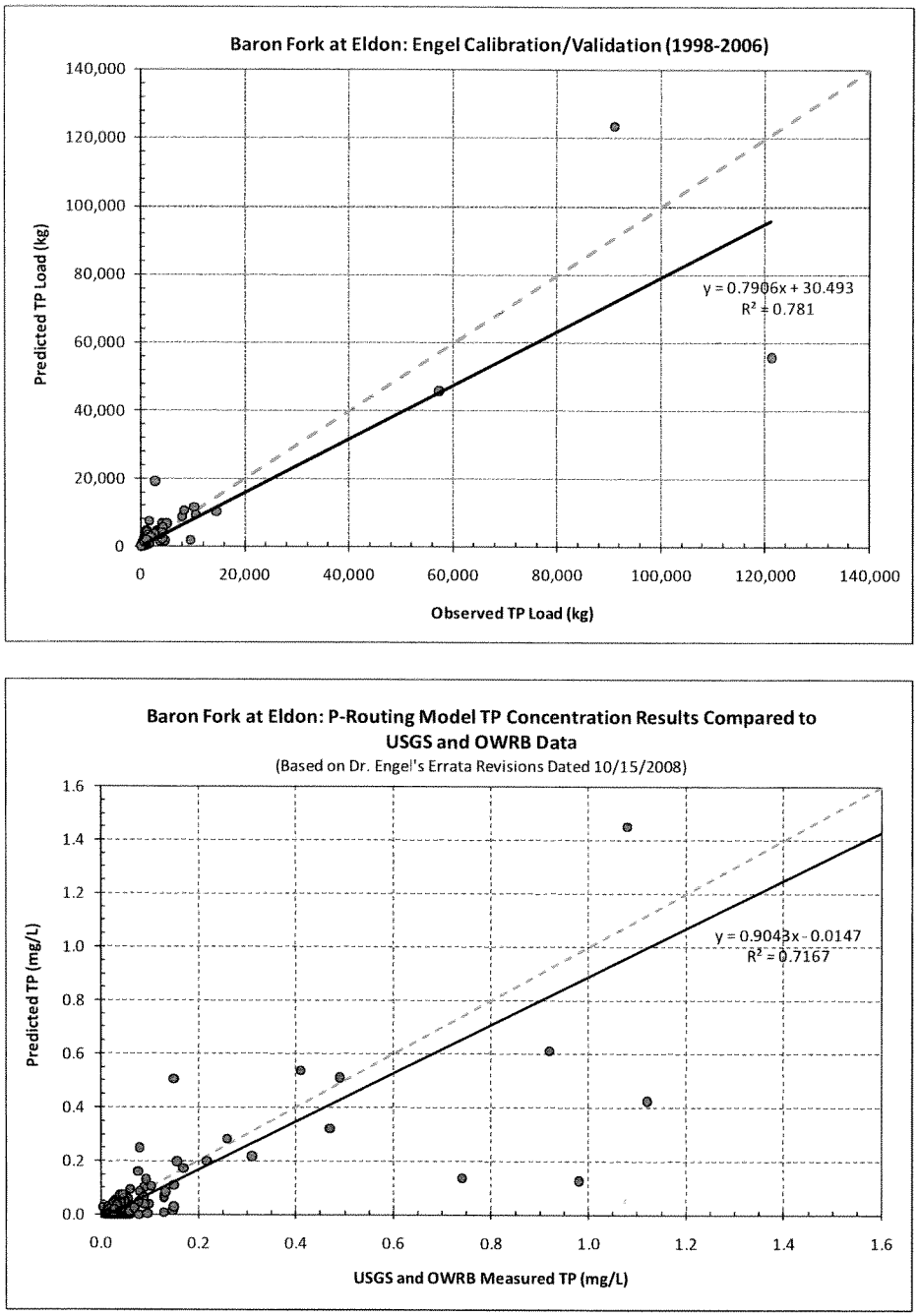


Figure 16. **Dr. Engel's Combined Calibration/Purported Validation Results for Baron Fork at Eldon for his Predicted Daily P Loads (top panel) and Daily P Concentrations that Correspond to these Predicted P Loads (bottom panel)**

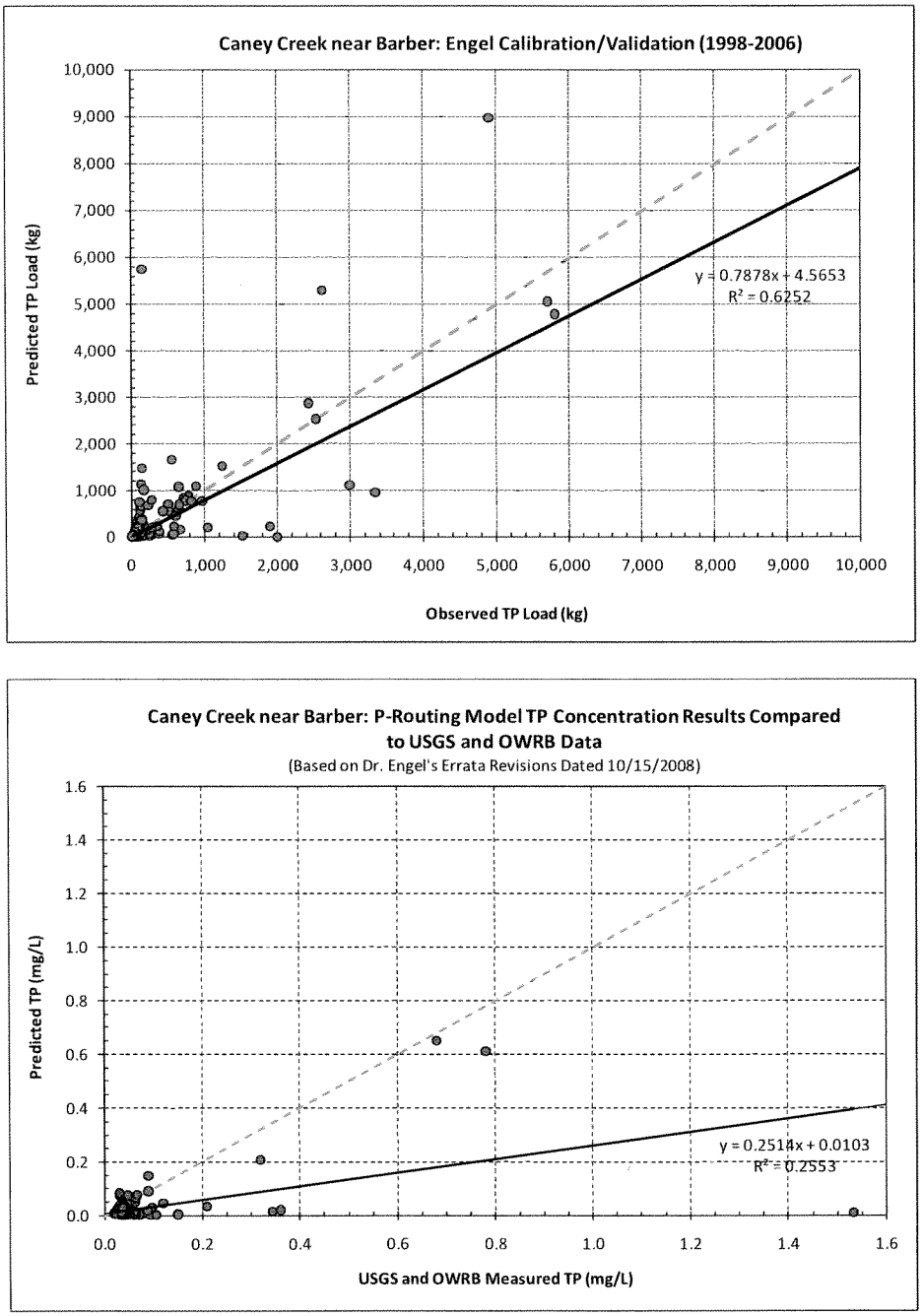


Figure 17. **Dr. Engel's Combined Calibration/Purported Validation Results for Caney Creek near Barber for his Predicted Daily P Loads (top panel) and Daily P Concentrations that Correspond to these Predicted P Loads (bottom panel)**

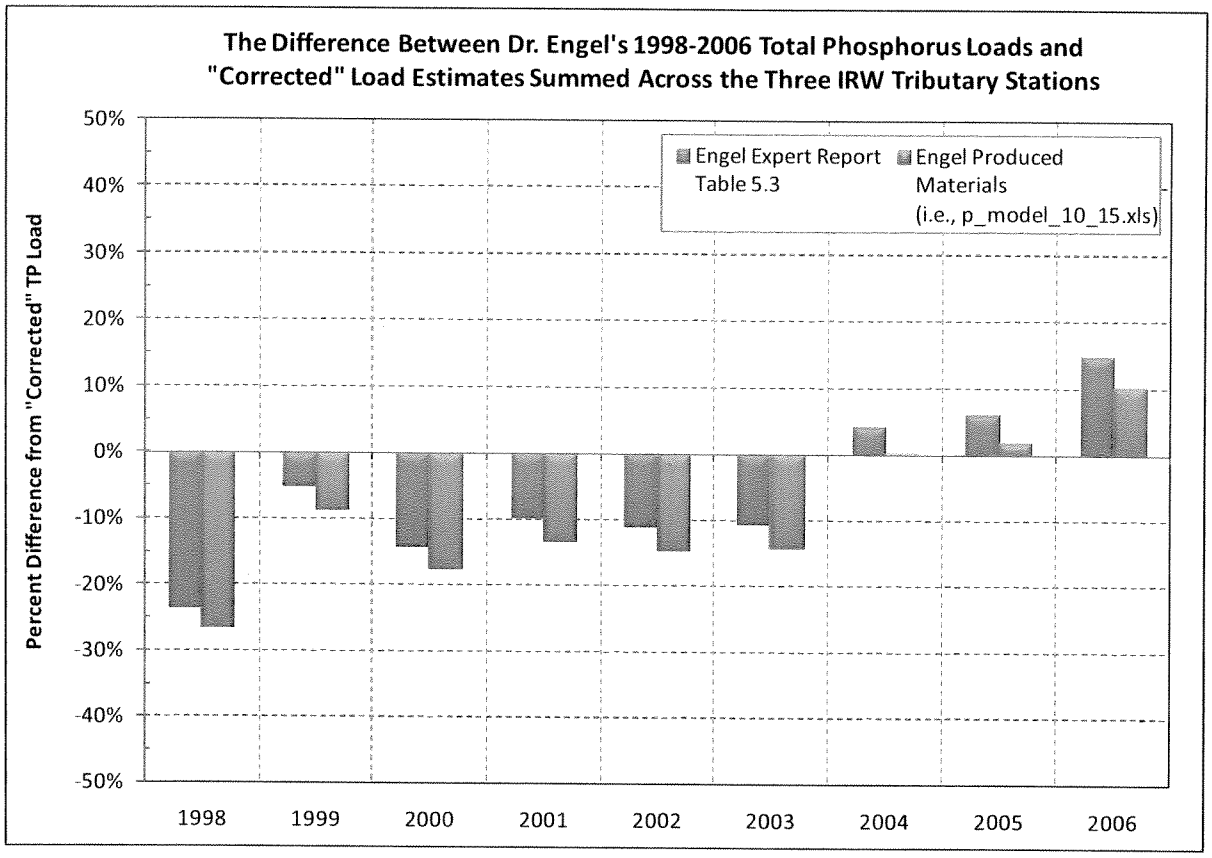


Figure 18. **Differences Relative to Correct Observed Loads for Two Different Versions of Observed Total P Loads Calculated by Dr. Engel: One Version in Table 5.3 of Dr. Engel's Expert Report and the other in his Routing Model Spreadsheet ("p_model_10_15.xls")**

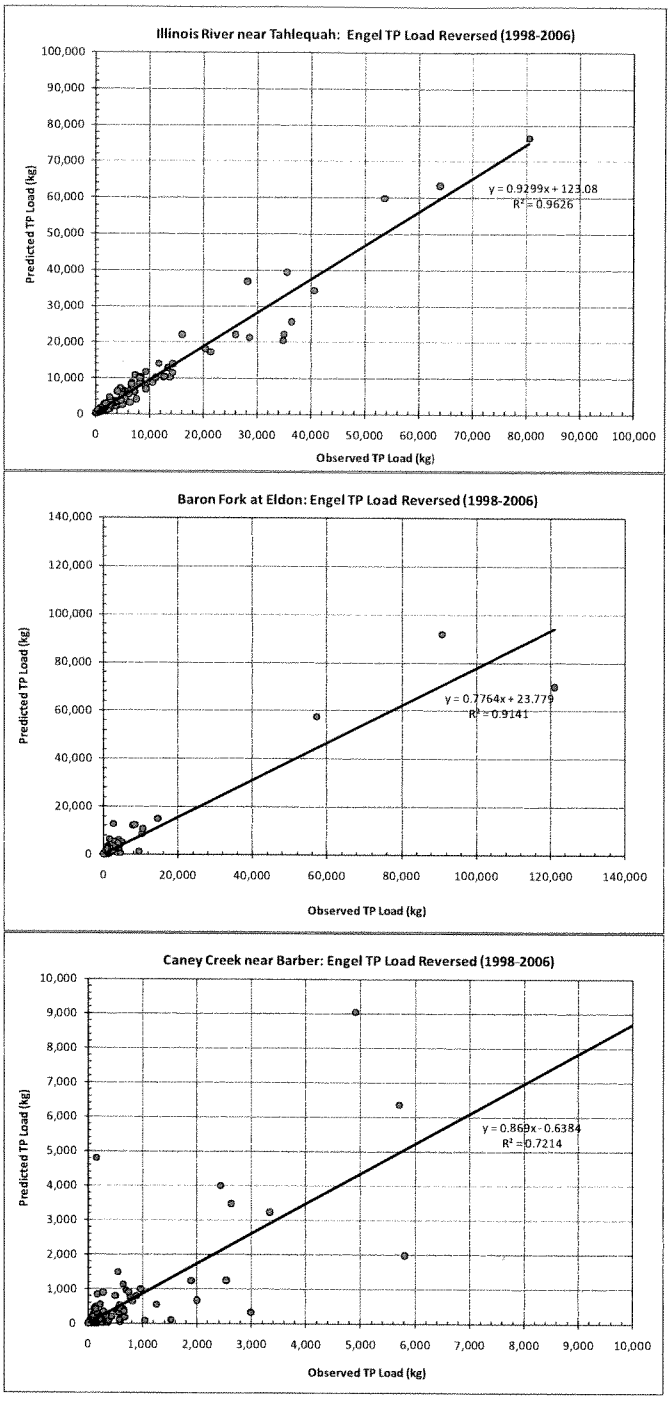


Figure 19. **Combined Calibration/Purported Validation Results for Daily P Load near Tahlequah (top panel), Baron Fork at Eldon (middle panel) and Caney Creek near Barber with Chronologies of Predicted GLEAMS Plus WWTP Loads Reversed from Last Day to First Day for each Watershed**

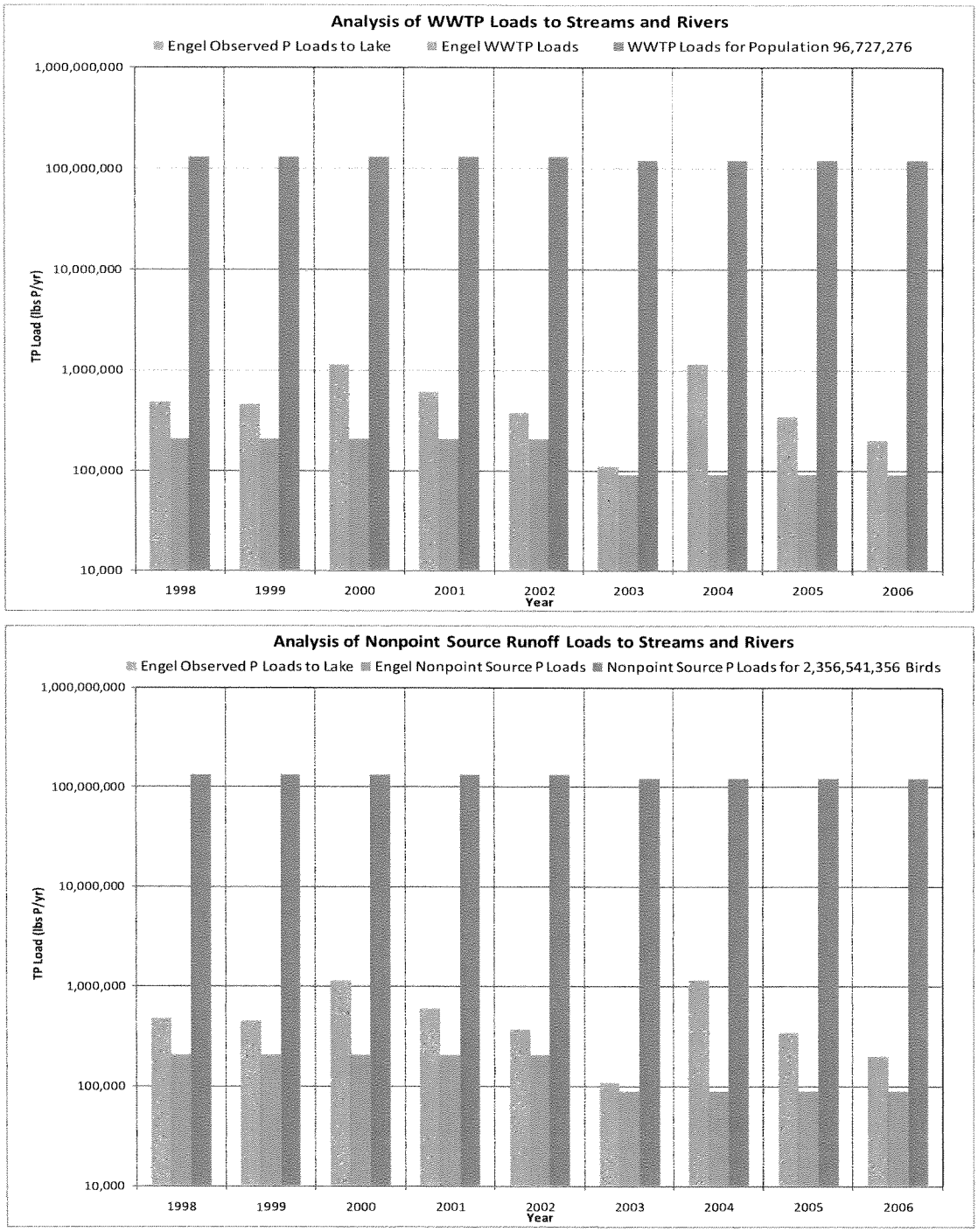
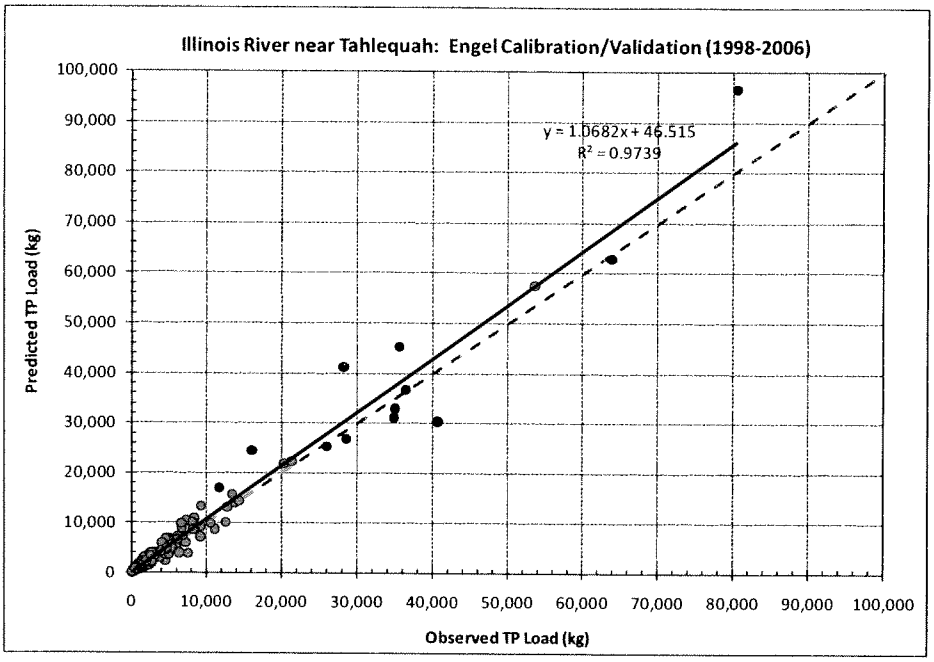


Figure 20. Ranges of P Loads from WWTPs (top panel) and Nonpoint Source Runoff from GLEAMS (bottom panel) that Can Still be Calibrated to the Observed P Loads to Lake Tenkiller in Dr. Engel's Expert Report



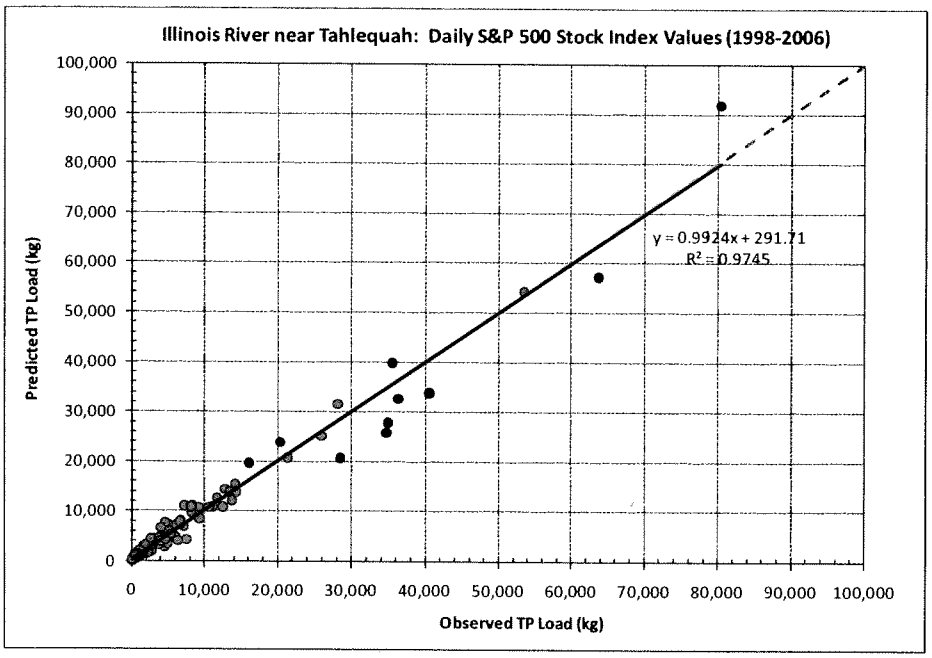


Figure 21. **Dr. Engel's Combined Calibration/Purported Validation Results near Tahlequah for his Predicted Daily P Loads (top panel) and Daily S&P 500 Stock Index Values (bottom panel) for 1998-2006**

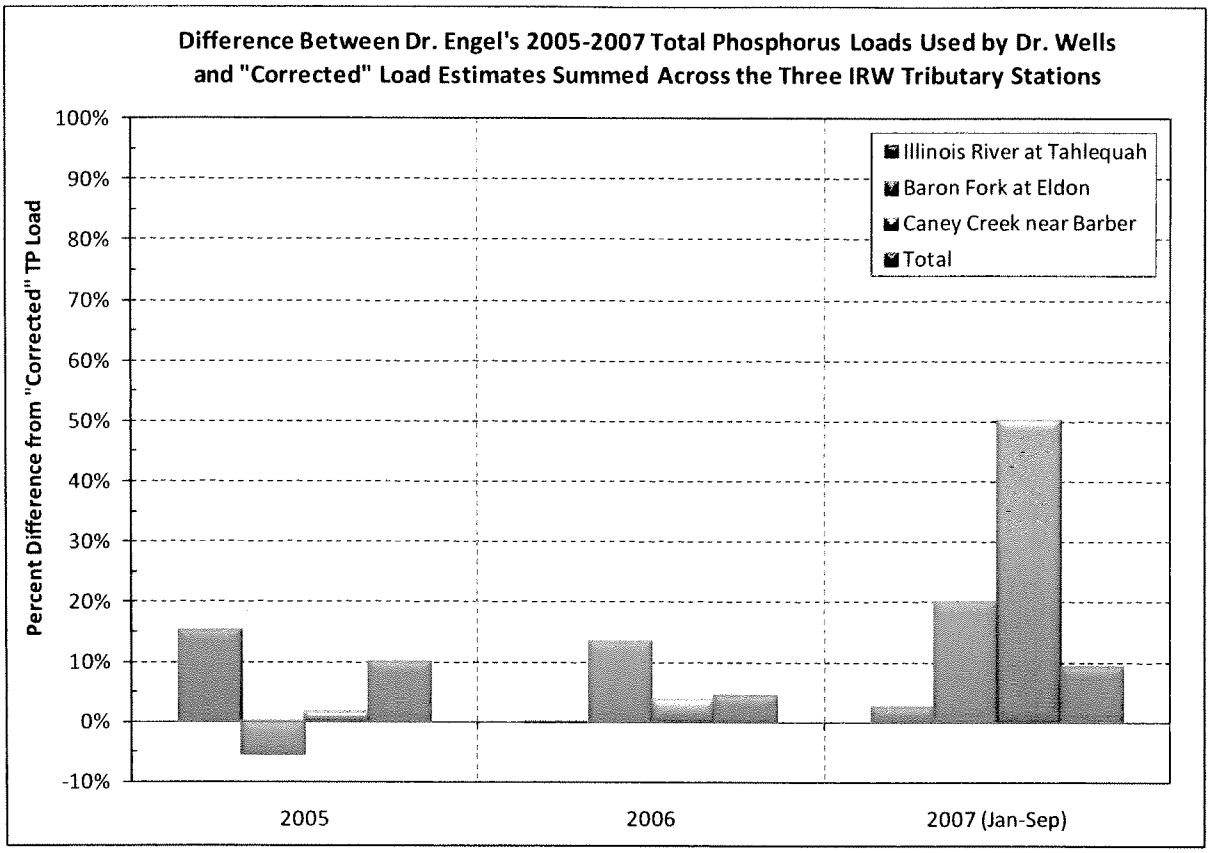


Figure 22. Differences Relative to Correct Observed Loads for Total P Loads Calculated by Dr. Engel for Dr. Wells to use in his Model of Lake Tenkiller for each Subwatershed and the IRW

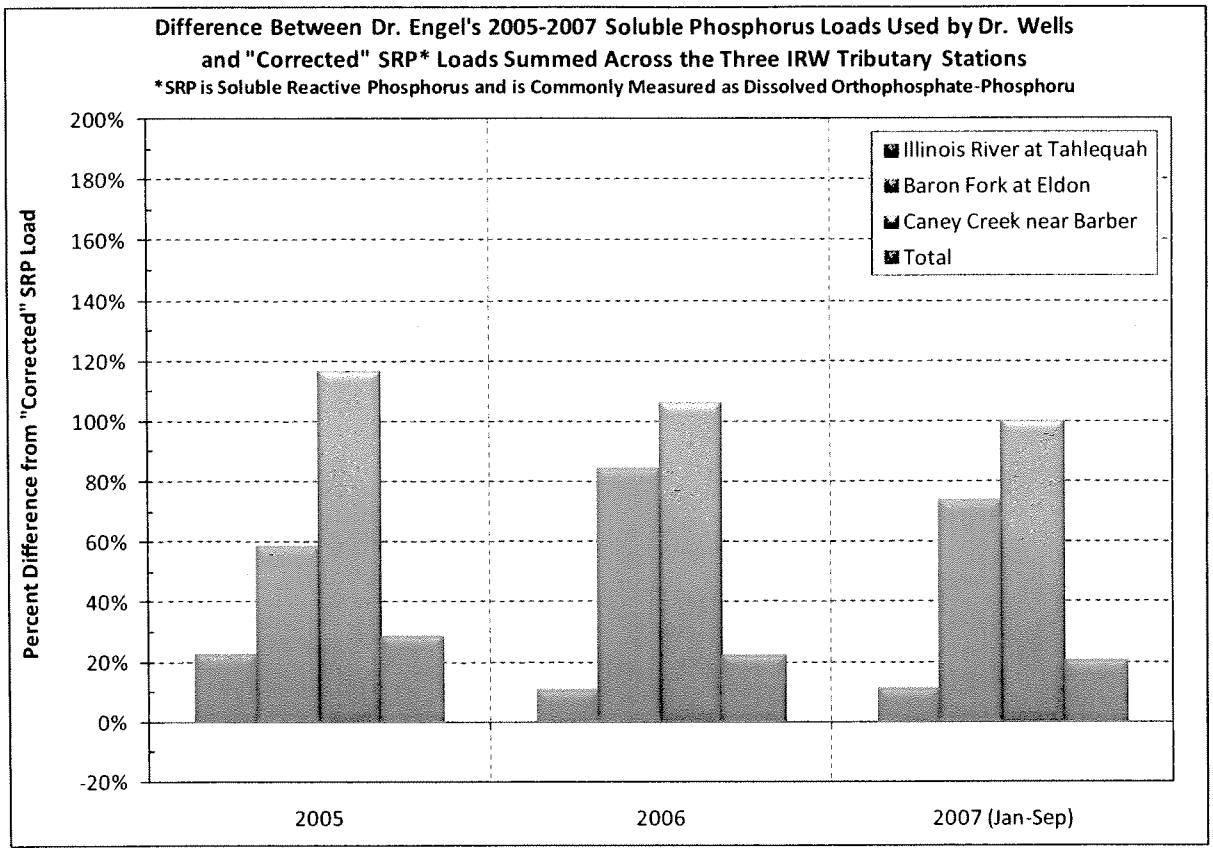


Figure 23. Differences Relative to Correct (SRP) Observed Loads for the Soluble Phosphorus (SP) Loads Actually Calculated by Dr. Engel for Dr. Wells to use in his Model of Lake Tenkiller for each Subwatershed and the IRW

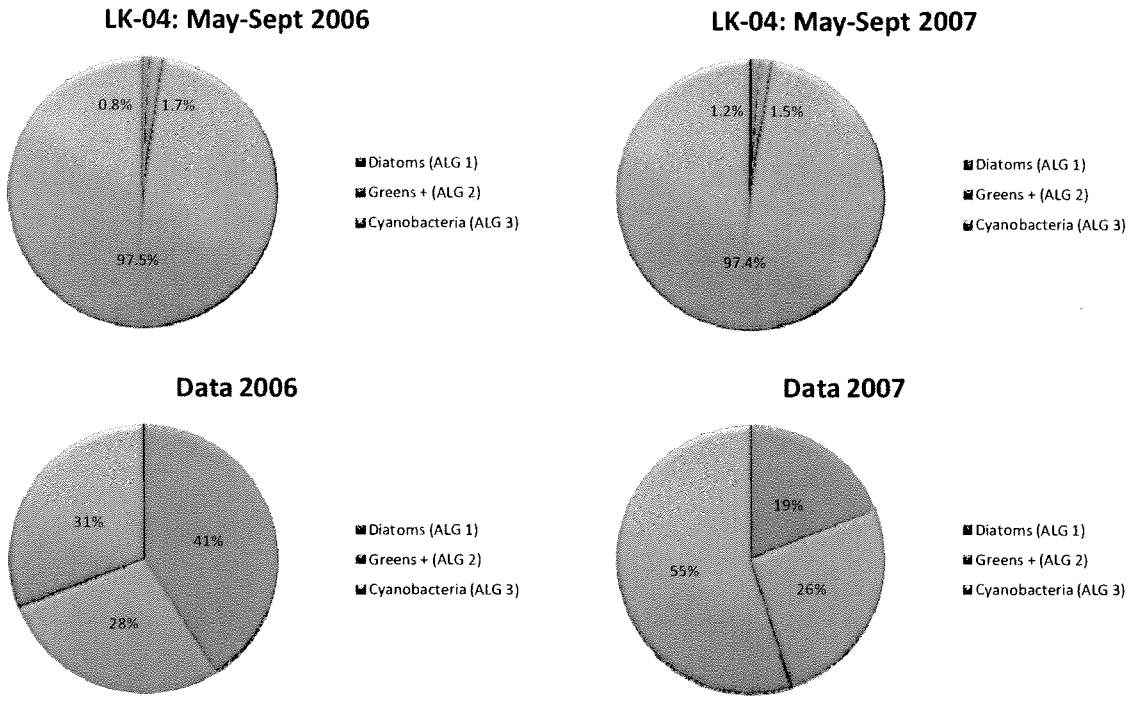


Figure 24. Comparisons Between Predicted (top) and Observed (bottom) Values for Relative Proportions of the Three Algal Groups in Dr. Wells' Model at Station LK-04 in Lake Tenkiller (Dr. Wells' Produced Materials, Dated January 25, 2008)

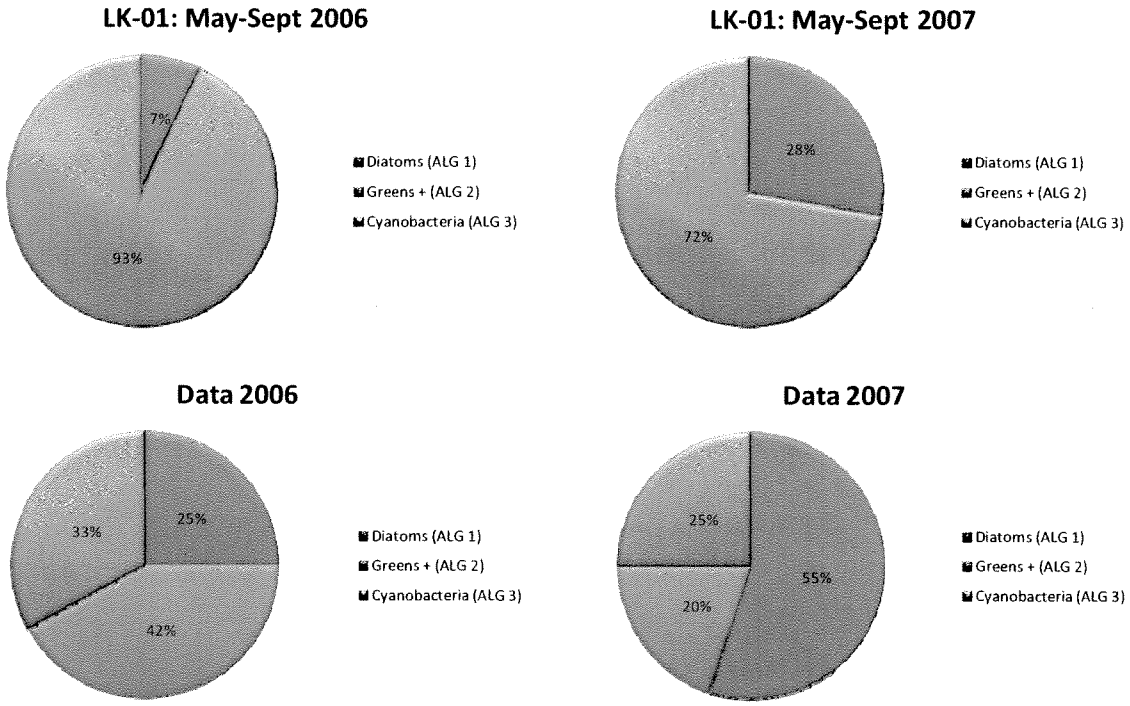


Figure 25. Comparisons Between Predicted (top) and Observed (bottom) Values for Relative Proportions of the Three Algal Groups in Dr. Wells' Model at Station LK-01 in Lake Tenkiller (Dr. Wells' Produced Materials, Dated January 25, 2008)

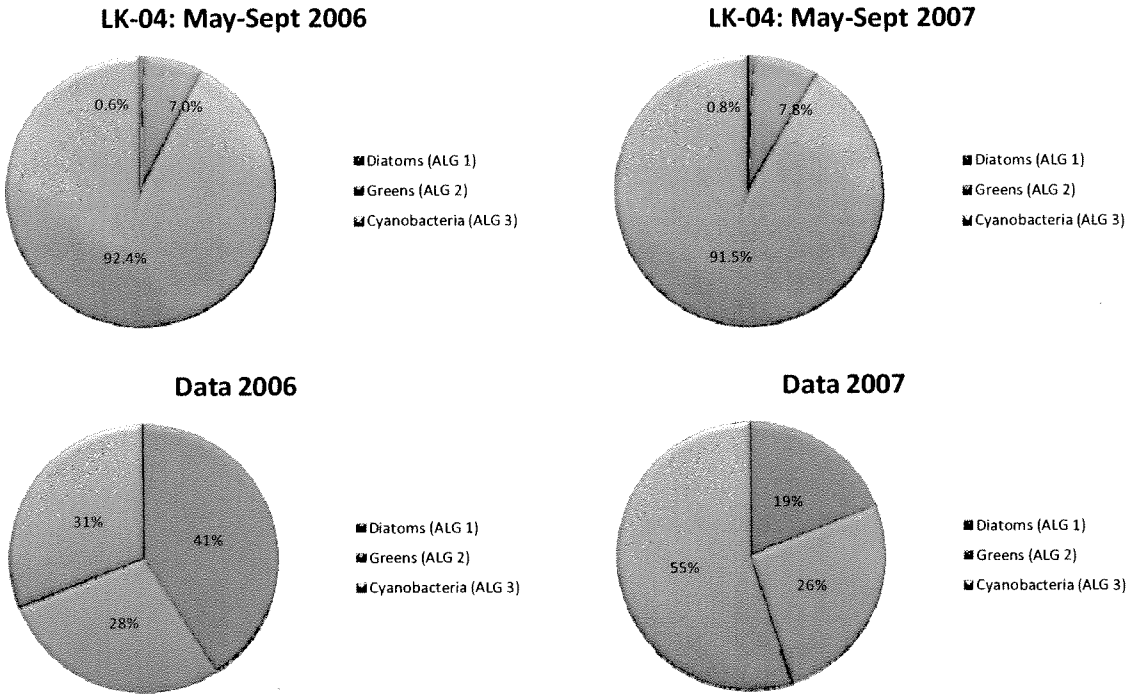


Figure 26. **Comparisons Between Predicted (top) and Observed (bottom) Values for Relative Proportions of the Three Algal Groups in Dr. Wells' Model at Station LK-04 in Lake Tenkiller (Dr. Wells' Produced Materials, Dated May 21, 2008)**

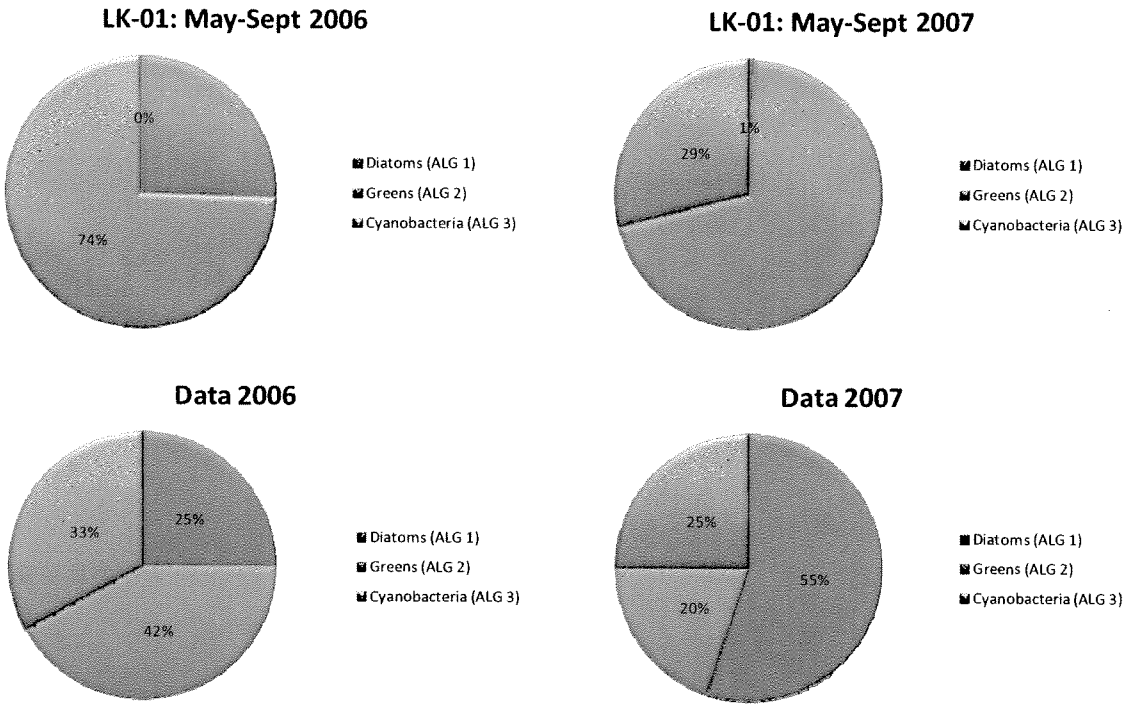


Figure 27. Comparisons Between Predicted (top) and Observed (bottom) Values for Relative Proportions of the Three Algal Groups in Dr. Wells' Model at Station LK-01 in Lake Tenkiller (Dr. Wells' Produced Materials, Dated May 21, 2008)

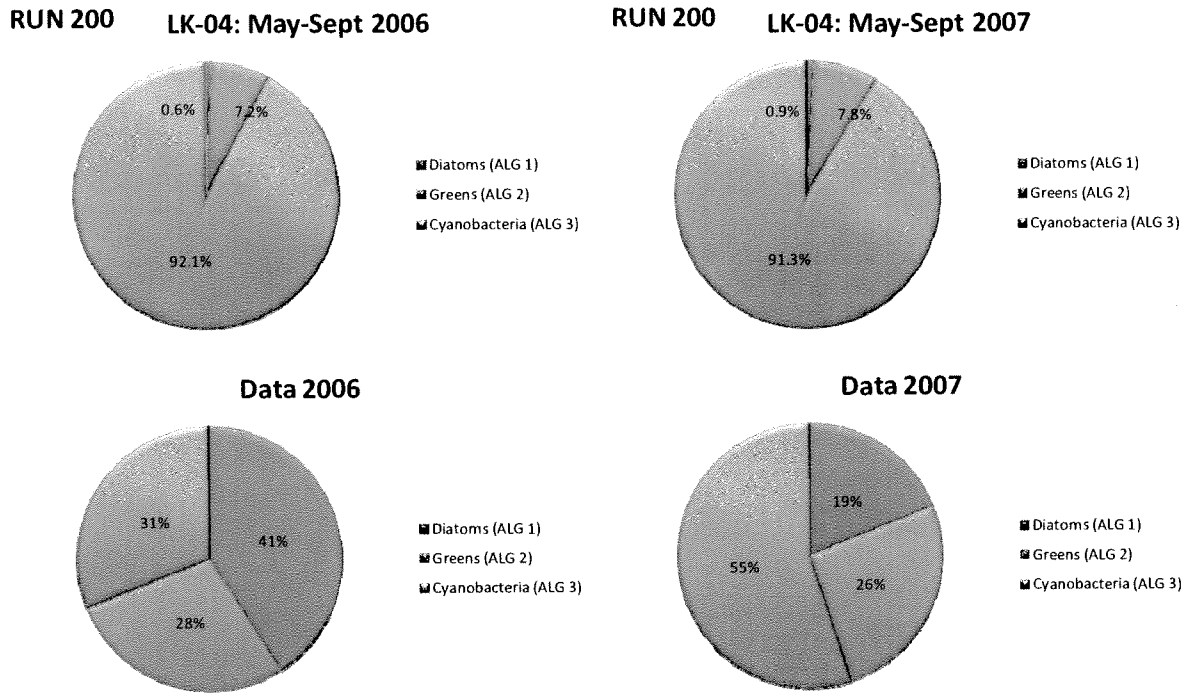


Figure 28. **Comparisons Between Predicted (top) and Observed (bottom) Values for Relative Proportions of the Three Algal Groups in Dr. Wells' Model at Station LK-04 in Lake Tenkiller (Run 200 in Dr. Wells' Expert Report)**

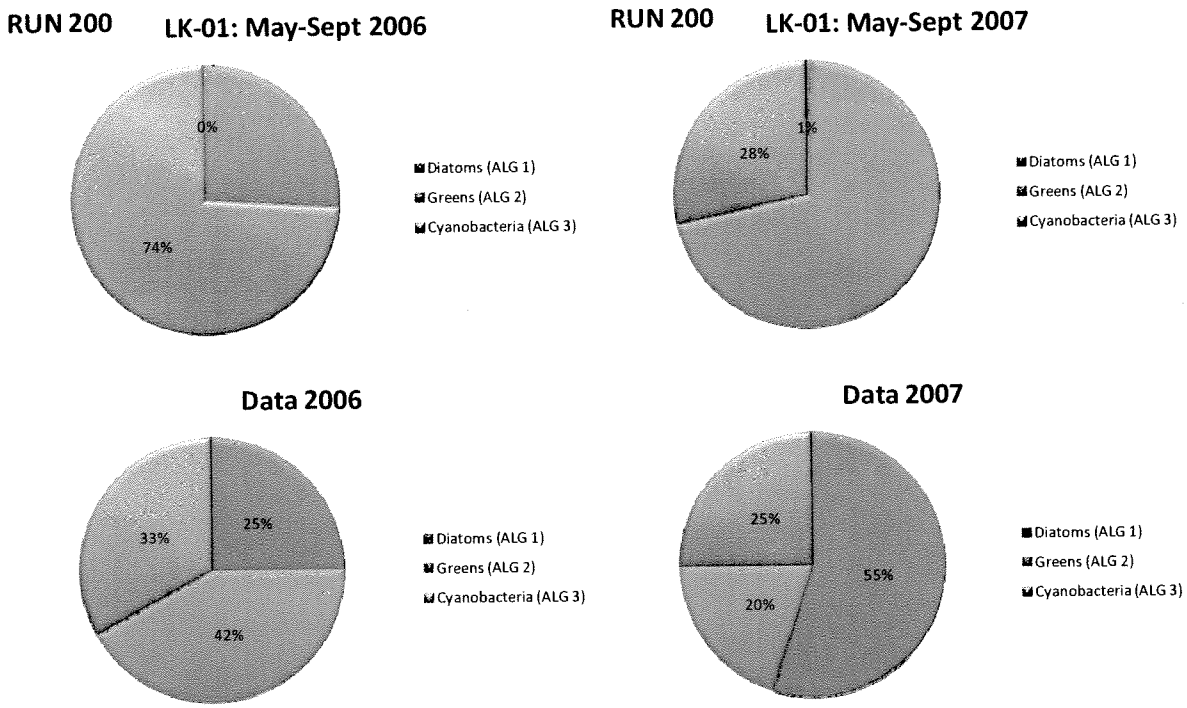


Figure 29. **Comparisons Between Predicted (top) and Observed (bottom) Values for Relative Proportions of the Three Algal Groups in Dr. Wells' Model at Station LK-01 in Lake Tenkiller (Run 200 in Dr. Wells' Expert Report)**

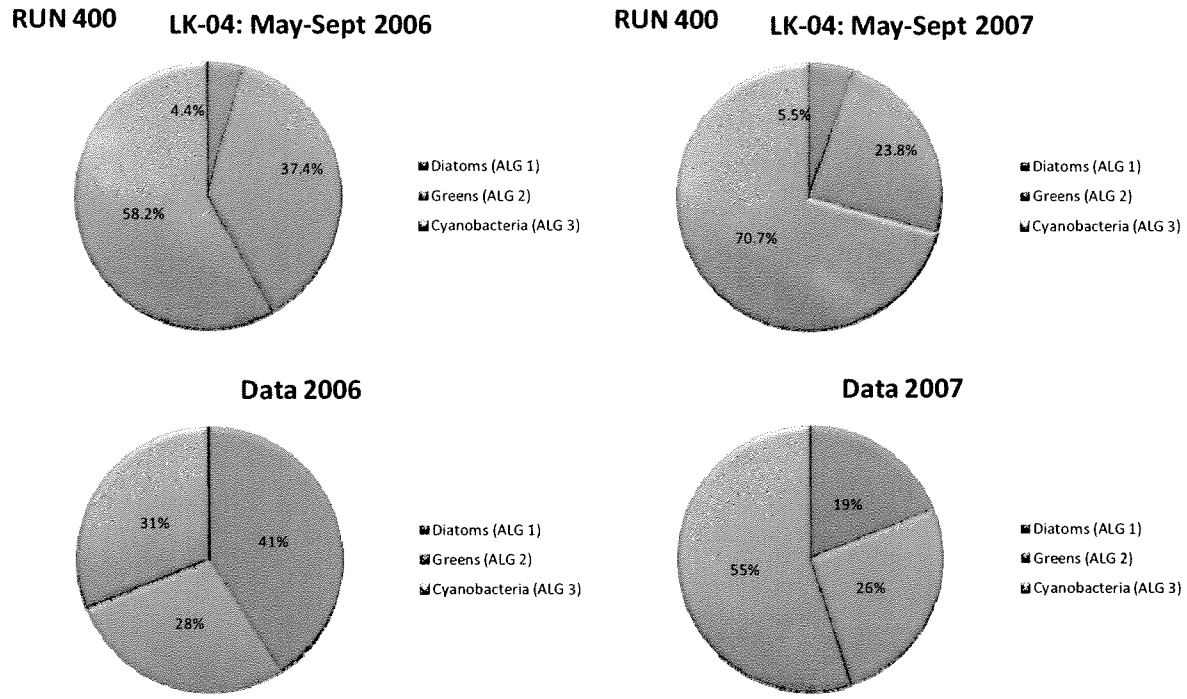


Figure 30. Comparisons Between Predicted (top) and Observed (bottom) Values for Relative Proportions of the Three Algal Groups in Dr. Wells' Model at Station LK-04 in Lake Tenkiller (Run 400 in Dr. Wells' Second Errata)

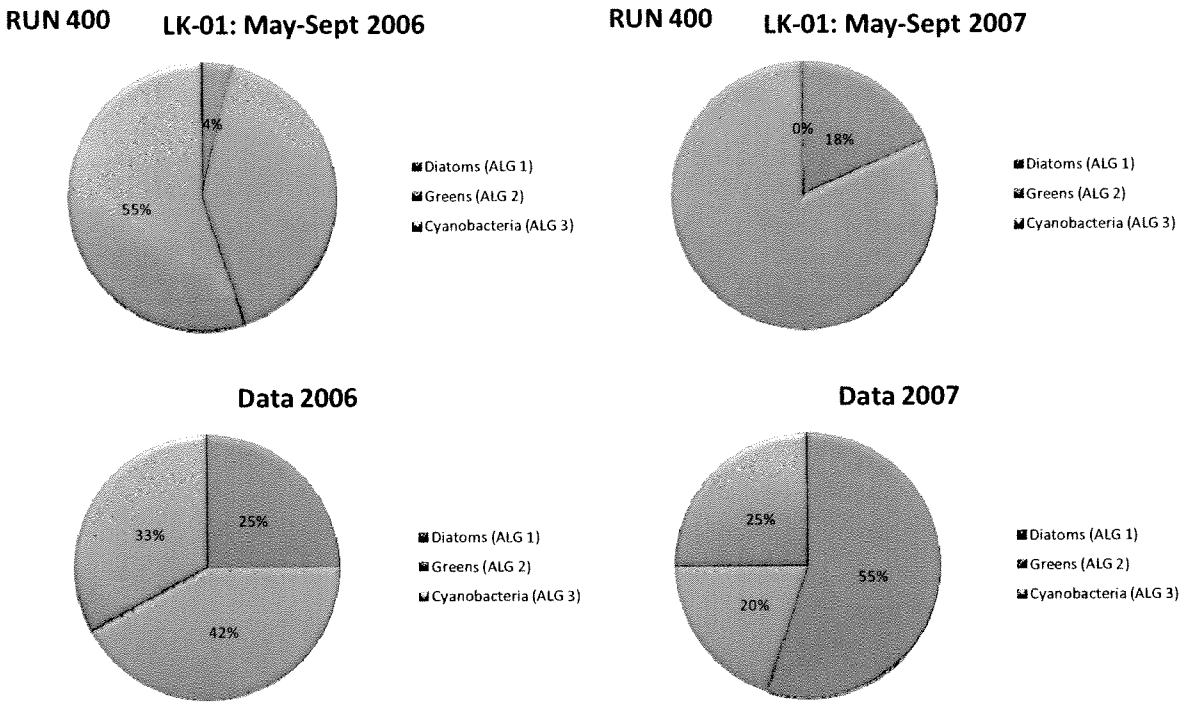


Figure 31. **Comparisons Between Predicted (top) and Observed (bottom) Values for Relative Proportions of the Three Algal Groups in Dr. Wells' Model at Station LK-01 in Lake Tenkiller (Run 400 in Dr. Wells' Second Errata)**

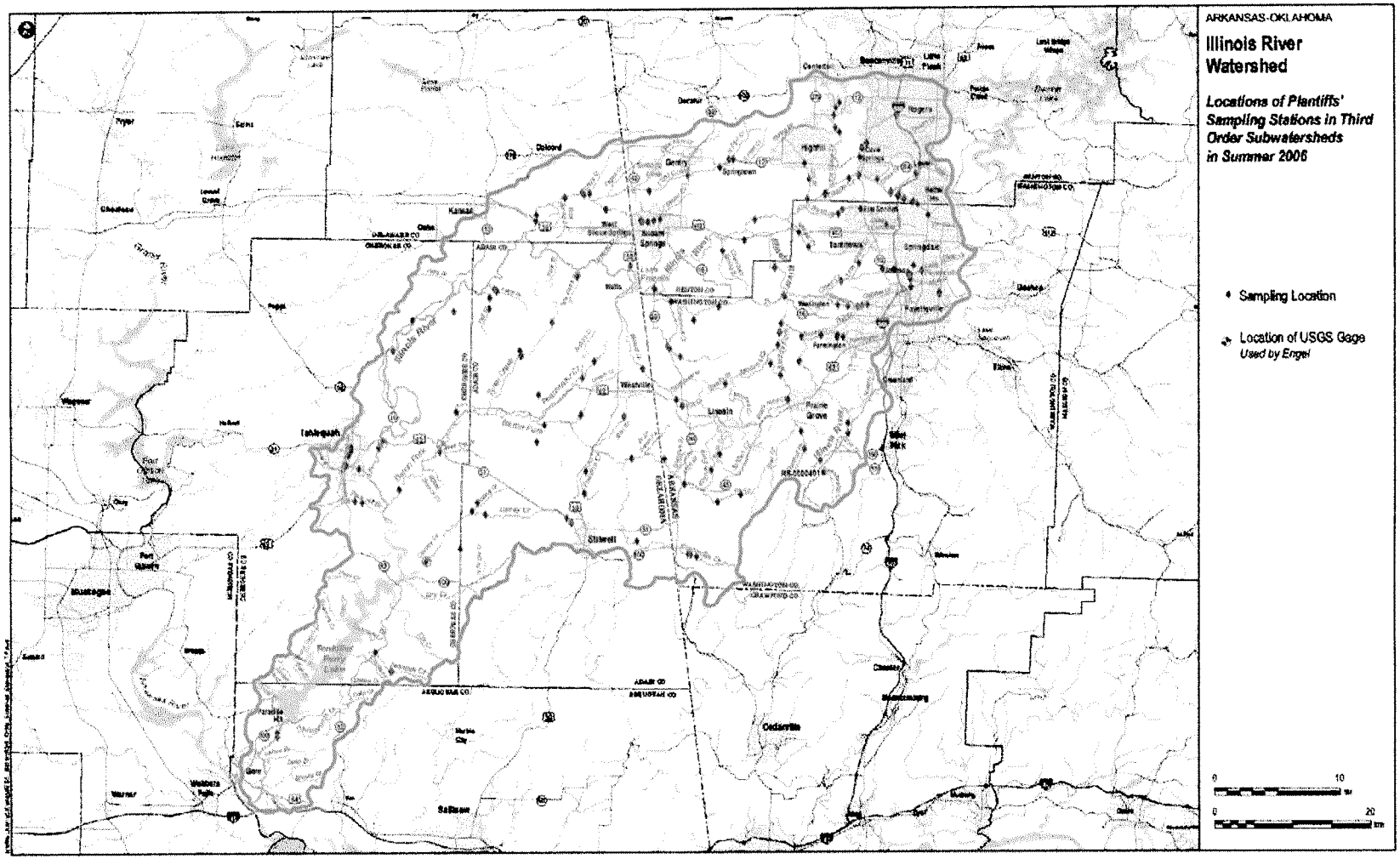


Figure 32. Map of Locations of Plaintiffs' Sampling Stations in Third-Order Streams for Summer 2006

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